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3. Most of the following factories are producing about 50% of their capacities, however, some are being supplied with additional equipment and are expected to show better production results in the future:

- (1) Northwest Steel Works: Has an office staff of about 250 persons, many of whom are Japanese experts, and about 3000 workmen. This plant now produces more steel than is required by Shansi Province and part is being shipped to Peiping and Hsian. It has a 5000 kilowatt generator, two 200-ton blast furnaces, a 240-ton coke oven, two rolling mills and one electric furnace. There are three units comprising the 5000 kilowatt generator, so that this plant can be run continuously. Under normal conditions, the estimated monthly output, [redacted] is as follows:
  - 3000 tons steel ingots
  - 3600 tons steel bars, round, square, octagonal, etc., plates, T- and angle irons, etc.
  - 5000 tons pig iron
  - 200 tons semi-finished by-products
  - 50 tons carbide calcium
- (2) Locomotive Plant: Employs about 2000 workmen and over 100 office staff workers, including Japanese. This plant is equipped with one 1000 kilowatt turbo-generator, an independent repair shop, a carbon-electrode plant, a complete collection (partly of Japanese make) of machine tools totaling over 250 sets. The present capacity is as follows: 100 freight cars can be repaired, up to 30 locomotives can be overhauled and up to 25 machines can be cleaned and reinstated. Boilers up to ten tons can be handled and bridge material and electrodes for electric furnaces made.
- (2) Machine Repair Plant: Employs about 2500 workmen and 100 staff members. This plant has over 300 sets of machine tools and a daily output of about three tons of various technical instruments, mining equipment and agricultural implements.
- (4) Yutzu (112-44, 37-39) Steel Machinery Plant: Employs about 1000 workmen and 50 staff members. This plant has a single oxygen generation plant, wire and nail manufacturing facilities, one complete and one-half-ton electric furnace, another three-ton electric furnace and about 200 various sets (partly incomplete) of machine tools. The estimated monthly output is: up to 100 tons of boilers, looms, pumps, etc. 50 units of various other machines. Between the end of March and the end of May 1948 a few hundred pumps were remodeled. They will be distributed among farmers for field irrigation. These pumps were purchased in 1947 through UNRRA sources and flown to Taiyuan. Farmers are now being trained in the plant's yard to use the pumps and it is expected that the pumps will be in operation by autumn.
- (5) Chemical Plant: 750 workmen; 100 office staff. This plant has eight departments:
  - Alcohol, for technical purposes only.
  - Ether, up to ten tons of which can be produced monthly
  - Sulphuric acid, up to 50 tons per month.
  - Phosphorus (electric process) Sesquisulphide, up to one and one-half tons per month.
  - Explosives for both coal and iron mines, over 50 tons a month
  - Smokeless powder
  - Black powder and ammonium nitrate works
- (6) Cement Plant: 500 workmen and 50 staff members. With some additional equipment the output of this plant could easily be doubled, since the operation is very simple. At present there are two sets of rotary kiln equipment, one cement drying plant, one 300 horsepower stone crusher and one 200 horsepower coal crusher. Up to 25 tons of cement can be produced daily. Cement bags are being imported from the United States. Almost every aircraft leaving Taiyuan takes cement to Hsian or Peiping.
- (7) Ceramic Plant: 500 workmen and 30 staff members. The output is chiefly for domestic use, but foreign utensils can also be made of any shape and design, including colors. Monthly output of glassware and porcelain ware is about 30,000 units per month each. At the same time, up to 500,000 bricks and over a ton of fine chamotte glazed bricks can be produced each month. Flats, angles and half-rounds are also made.

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- (8) Electrolysis Plant: 100 qualified workmen and 20 staff members. This plant has one set of each of the following: bleaching powder equipment, chlorate of potash equipment, hydrochloric acid plant, caustic soda plant; it also has forty electrolysis diaphragm cells. Monthly production is 30 tons of bleaching powder, 25 tons of hydrochloric acid, 30 tons of caustic soda and two to three tons of chlorate of potash.
- (9) Tannery: About 100 workmen and ten staff members. The monthly output of this plant is about 800 leather belts, 1000 soles, and about 1000 pieces of trunk and smooth leather. The finished goods are of inferior quality because they contain too much salt, as a result of which the fat content in the leather dries out, thus causing burning. As a further result, the leather is not sufficiently elastic and cracks after very little use. In pre-war years experiments with the tanning process were made and samples were sent to Germany, where it was discovered that unless the water which was used for tanning was purified with a certain new distiller, the quality of the leather tanned in China would not be high enough for European markets.
- (10) Match Factory: About 300 workmen and 30 staff members. The monthly output of this plant is approximately 3000 boxes. Because of the lack of certain raw materials, such as imported phosphorus, the quality of the matches is about the same as that of the matches produced by the Japanese. The match must first be struck and allowed to burn down to the wooden stem before a cigarette can be lighted. Otherwise, the smoker inhales the chemical fumes, which are harmful to the lungs.
- (11) Cigarette Factory: 600 workmen and 40 staff members. The monthly output of this factory is about 3000 boxes of low-grade cigarettes. This plant has fourteen tobacco cutting machines, 15 benches (?banks) of cigarette rolling machines, one set of double system tobacco heating equipment (not now in use), for use in the so-called "second process". All foreign cigarettes are prohibited in Taiyuan and even "Coffee" brand cigarettes, which are manufactured in Shanghai and brought to Taiyuan with the consent of the authorities, are not sold openly, but illegally at 110,000 CMC per package of 20 cigarettes. In Shanghai they cost about 12,000 CMC. Cigarettes of American origin are obtainable for about 400,000 CMC a package. These are brought in with transport planes from Shanghai and Peiping.
- (12) Northwest Paper Mill: 500 workmen and 40 staff members. The monthly output of this mill is up to 200 tons of various wrapping and writing papers. Because of poor machinery, the product is of a low grade. The mill needs complete sets of new machines. Present machinery includes 16 500-pound hollanders, three two-ton spherical digesters, two 1500-pound potchers, five 1000-pound crush-beaters, two 1500-pound washing engines, one Japanese paper machine, one American cylindrical paper machine and two 440 kilowatt alternating generators in fair condition. As pulp is very difficult to obtain, native raw material and paper waste are collected and remade into paper.
- (13) Northwest Printing Works: 150 workmen and 30 staff members. The daily capacity is about 700,000 various pieces. This installation needs modern equipment to produce anything better than almost primitive products. The equipment, only partially operable at present, includes ten cylindrical printing presses, two rotary offset presses, one guillotine cutter, one lithographic press and some engraving equipment.
- (14) Woolen Mill: 300 workmen and 30 staff members. The equipment consists of 700 spindles, 40 power looms, four frames wool carding machines and two worsted carding machines. The mill was improved by the Japanese; therefore the quality of the products, especially blankets, ranges from fair to good. Besides flannel, blankets and serge, other products, such as scarfs, ear and head protectors, etc., can be manufactured. About 20 complete blankets with color designs are produced daily. Plain blankets could be made at a rate of 50 a day. The monthly output of flannel is estimated at 10,800 and of serge, 11,600 yards.

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- (15) Yanshou (? Yanshao/113-44, 40-23) Sewing Mill: 250 workmen and 20 staff members. Equipment includes over 300 sewing machines, 75 machines for the manufacture of hosiery and gloves and 24 sweater-knitting machines. There are also some other items of equipment which are not in use and are in a neglected condition. The daily output of the mill is 1500 pounds of gloves and hosiery and about 2000 pounds of sweaters.
- (16) Cotton Spinning Mill: 300 workmen and 30 staff members. The monthly production is 5000 40-yard rolls of white cotton cloth and five tons of cotton yarn. There are 6000 spindles and over 200 power looms.
- (17) Taiyuan Cotton Mill: 300 workmen and ten staff members. The monthly output is 900 40-yard rolls of white cotton cloth. Forty power looms and some secondary machinery comprise the mill's equipment.
- (18) Yutzu Cotton Mill: 150 workmen and 20 staff members. The monthly production is about 900 40-yard rolls of white cotton cloth. Forty power looms and some secondary equipment, as above, comprise the mill's equipment.
- (19) Yutzu Cotton Spinning Mill: 900 workmen and 60 staff members. The mill's equipment consists of 40,000 spindles, 2000 doubler spindles, one 1150 kilowatt generator, 300 automatic looms and 200 power looms. Monthly output: cotton yarn, about 200 tons, 15,000 40-yard rolls of white cotton cloth, three tons of absorbent cotton and 3000 blankets. This mill, under proper management, can produce good-quality materials and large quantities by various by-products. Many of its buildings are not now in use.
- (20) Taiyuan Main Flour Mill: 150 workmen and 50 staff members. The mill is completely equipped and employs the so-called "Twelve" system. The daily maximum output is about 400 50-pound bags of flour. The equipment is semi-automatic, without a conveyor system.
- (21) Taiyuan Small Flour Mill: 50 workmen and 15 staff members. The daily maximum output is 900 bags. Equipment consists of ten mills, most of which are worn out.
- (22) Yutzu Small Flour Mills: Same as above, except that this plant has only three mills.
- (23) Coal Mine Number 1: 3000 miners and 130 staff workers. The monthly output is 40,000-45,000 tons. The mine has one 1000 KVA generator, one vertical shaft, one inclined shaft and one level shaft, one 120 horsepower hoist, one 200 horsepower hoist, one 30 horsepower hoist, one 20 horsepower hoist and three 50 horsepower hoists.
- (24) Coal Mine Number 3: 400 miners and 20 staff workers. The monthly production is about 15,000 tons. The mine has one 50 kilowatt generator, one 40 kilowatt generator, one 4 kilowatt direct current generator, three level shafts, one 25 horsepower engine, one 10 horsepower motor, one 20 horsepower hoist and one 10 horsepower hoist.
- (25) Eastern Iron Mine: 60 workmen and 20 staff workers. The daily production is about 50-70 tons of ore. Single system equipment only (? A single set of mining machines).
- (26) Taiyuan City Power Plant: 120 workmen and ten staff members. The daily output is 20,000 KWH. Equipment includes one 3000 kilowatt alternating current generator, one 1150 kilowatt alternating current generator and two 300 kilowatt alternating current generators. The supply is regular but 10-15% below the required voltage.
- (27) Outside City Power Station: 250 workmen and 25 staff workers. Monthly output is 3,600,000 KWH. Equipment includes one 5000 kilowatt generator, one 4000 kilowatt generator, one 2500 kilowatt generator and one 1000 kilowatt generator.
- (28) Waterworks: In deteriorated condition; needs complete overhaul. At times there is no water.

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(29) Experimental Station: 60 workmen and 30 staff members. Experimental laboratory, chemical laboratory, soap-making laboratory, eight hydraulic presses. Daily output: one and one-half tons of laundry soap, about 1000 bars of toilet soap and about one ton of various seed oils.

4. The Tung Chi Corporation is manufacturing rifles, pistols, automatic rifles, light and heavy machine guns, light artillery pieces, hand grenades, shells and cartridges.
5. Because of poor equipment and the shortage of raw materials, the munitions factories in Taiyuan cannot make the percussion caps for cartridges. Marshal YEN Hsi-shan is planning to invite skilled technicians in Japan to come to Shansi and to purchase the necessary raw materials for the caps.

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